

New Wisconsin Computer Science Education Standards

Wisconsin's Vision

Wisconsin defines Computer Science (CS) as "an academic discipline that encompasses the study of computers and algorithmic processes, including their principles, hardware and software designs, applications, networks, and impact on society."



These standards will:

- 1. Introduce the fundamental concepts of CS to all students, beginning in elementary school.
- 2. Present CS in secondary school in a way that will be both accessible and worthy of a CS/graduation credit.
- 3. Offer additional secondary-level CS standards so that interested students can study CS in depth and prepare for entry into a career or college.
- 4. Increase the knowledge of CS for all students, especially those from underrepresented groups.

World-class Standards

These standards were vetted in a collaborative, innovative process by education, business, and industry professionals. The standards guide Wisconsin schools, teachers, and community partners in development and continuous improvement of world-class CS courses throughout Wisconsin's K-12 systems. These five strands contain learning priorities and performance indicators to develop specific knowledge and skills: Algorithms and Programming ● Computing Systems ● Data and Analysis ● Impacts of Computing ● Networks and the Internet

Innovative

Wisconsin is the ninth state to develop state standards in Computer Science. The Wisconsin standards are both informed by and have influenced national standards work. The standards are rigorous, clear, and for specific grade bands.

Forward

These standards give Wisconsin teachers access to the foundational knowledge and skills needed to educate students for successful entry into hundreds of high-wage, high-demand occupations and careers. They provide Wisconsin teacher preparation programs with specific understanding of what future teachers need to educate all students in CS knowledge and skills. The new CS standards support potential employers by developing a knowledgeable workforce, and make Wisconsin a better place for local and national technology firms.

